

**LISTING OF CLAIMS:**

The present listing of claims replaces all prior listings or versions of claims in the present application.

1. (Currently Amended) A corrosion-resistant metal made sensor for measuring mass flow rate and pressure of fluid, comprising:

(a) characterized by that it is so constituted that the mass flow rate and pressure of fluid are measured by its being equipped with a mass flow rate sensor part comprising

i. a corrosion-resistant metal substrate; and

ii. a thin film forming a temperature sensor and a heater installed on ~~at~~the back face side of ~~at~~the fluid contacting surface of thesaid corrosion-resistant substrate; and

(b) a pressure sensor part comprising a thin film forming a stain sensor element installed on the back face side of the fluid contacting surface of the corrosion-resistant metal substrate.

2. (Currently Amended) A corrosion-resistant metal made sensor for fluid as claimed in Claim 1, wherein theit is so constituted that a corrosion-resistant metal substrate is fitted into atthe mounting groove of a corrosion-resistant metal made sensor base such that thein a state in which its fluid contacting surface is exposed outwardly, and atthe peripheral edge of the corrosion-resistant metal substrate is hermetically welded to the sensor base.

3. (Currently Amended) A corrosion-resistant metal made sensor for fluid as claimed in Claim 1, wherein or Claim 2 is so made that the output drift to thepressure of the mass flow rate sensor part is corrected by theoutput of the pressure sensor part.

4. (Currently Amended) A corrosion-resistant metal made sensor ~~for fluid as~~  
claimed in Claim 1, ~~wherein the~~ ~~Claim 2 or~~ ~~Claim 3 is~~ ~~so~~ ~~made~~ ~~that a~~ ~~thin film~~ ~~includes~~ ~~is~~  
constituted with an insulation film formed on the back side of the fluid contacting surface of  
the corrosion-resistant metal substrate, a metal film ~~that~~ ~~which~~ forms ~~the~~ a temperature sensor,  
~~the~~ a heater and a strain sensor element, and a protection film ~~covering~~ ~~to cover~~ the insulating  
film and the metal film.

5. (Currently Amended) A fluid supply device ~~that employs~~ ~~for which~~ the  
corrosion-resistant metal made sensor according to Claim 1 ~~for fluid~~ is employed  
characterized by ~~that a corrosion-resistant metal made sensor for fluid~~ ~~stipulated in one of~~  
~~Claims 1 to 4~~ is mounted on a fluid controller in order that ~~the~~ flow rate and pressure of ~~fluid~~  
~~is~~ ~~can~~ be appropriately checked at at the time of the fluid control.

6. (Currently Amended) A fluid supply device ~~that employs~~ ~~for which~~ the  
corrosion-resistant metal made sensor according to ~~for~~ ~~fluid~~ is employed characterized by ~~that~~  
~~it is~~ ~~so~~ ~~constituted~~ that a sensor base of the corrosion-resistant metal made sensor for fluid in  
Claim 2, ~~wherein the~~ ~~sensor base~~ is positioned inside at the fluid passage of a body equipped  
with the afore-mentioned fluid passage that communicates ~~for communicating~~ between at the  
flow-in inlet for ~~the~~ fluid and at the flow-out outlet for the fluid by installing a metal gasket in  
order that hermeticity between the body and the sensor base is held by thrusting by the metal  
gasket through ~~the~~ mediation of the afore-mentioned sensor base, and at the same time  
stiffness of at the structural component disposed directly above the metal gasket to relatively  
raise ~~hold~~ the afore-mentioned hermeticity between the body and the sensor base is relatively

raised, thus suppressing the strain of the mass flow rate sensor part and the pressure sensor part caused by thrusting by the said metal gasket.

7. (NEW) A corrosion-resistant metal made sensor as claimed in Claim 2, wherein output drift to pressure of the mass flow rate sensor part is corrected by output of the pressure sensor part.

8. (NEW) A corrosion-resistant metal made sensor as claimed in Claim 7, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

9. (NEW) A corrosion-resistant metal made sensor as claimed in Claim 2, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

10. (NEW) A corrosion-resistant metal made sensor as claimed in Claim 3, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

11. (NEW) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 2 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

12. (NEW) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 3 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

13. (NEW) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 4 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.